POWER STRUCTURE OF CLASS HIERARCHY
FOR EXAMPLE LIBRARY

FIG. 1

```
FLOAT func1(FLOAT);
FLOAT func2(FLOAT);        ← 25
void main{
FLOAT a,b,c;
b=func1(a);
c=func2(b);
return 0;}
```

Pure FLOAT Model

FIG. 2

```
ToInt func1(ToInt);
I64_B func1(I64_B);
FLOAT func2(FLOAT);
void main{
ToInt a,b;                 ← 33a
FLOAT c;
b=func1(a);
c=func2(b.data);

return 0;}
ToInt func1(ToInt d)
{I64_B e(d);
 I64_B f;
 f=func1(e);
 return (ToInt) f;}
```

Mixed Model

FIG. 3

```
FLOAT func1(FLOAT);
ToInt func2(ToInt);
I64_B func2(I64_B);
void main{
FLOAT a;
ToInt b,c;
b.data=func1(a);          ←33b
c=func2(b);
return 0;}
ToInt func2(ToInt d)
{I64_B e(d);
 I64_B f;
 f=func2(e);
 return (ToInt)f;}
```

Mixed Model

FIG. 4

```
I64_B func1(I64_B);
I64_B func2(I64_B);   ←35
void main{
I64_B a,b,c;
b=func1(a);
c=func2(b);
return 0;
```

Pure Fixed Model

FIG. 5

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39	38	37	36	35	34	33	32
AG 7	AG 6	AG 5	AG 4	AG 3	AG 2	AG 1	AG 0

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
AH 15	AH 14	AH 13	AH 12	AH 11	AH 10	AH 9	AH 8	AH 7	AH 6	AH 5	AH 4	AH 3	AH 2	AH 1	AH 0

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
AL 15	AL 14	AL 13	AL 12	AL 11	AL 10	AL 9	AL 8	AL 7	AL 6	AL 5	AL 4	AL 3	AL 2	AL 1	AL 0

Layout of TMS320C54x Accumulator A

FIG. 6

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39	38	37	36	35	34	33	32
BG 7	BG 6	BG 5	BG 4	BG 3	BG 2	BG 1	BG 0

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
BH 15	BH 14	BH 13	BH 12	BH 11	BH 10	BH 9	BH 8	BH 7	BH 6	BH 5	BH 4	BH 3	BH 2	BH 1	BH 0

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
BL 15	BL 14	BL 13	BL 12	BL 11	BL 10	BL 9	BL 8	BL 7	BL 6	BL 5	BL 4	BL 3	BL 2	BL 1	BL 0

Layout of TMS320C54x Accumulator B

FIG. 7

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32	33	34	35	36	37	38	39
G0	G1	G2	G3	G4	G5	G6	G7
gh24	gh25	gh26	gh27	gh28	gh29	gh30	gh31

24	25	26	27	28	29	30	31
H8	H9	H10	H11	H12	H13	H14	H15
gh16	gh17	gh18	gh19	gh20	gh21	gh22	gh23

16	17	18	19	20	21	22	23
H0	H1	H2	H3	H4	H5	H6	H7
gh8	gh9	gh10	gh11	gh12	gh13	gh14	gh15

8	9	10	11	12	13	14	15
L8	L9	L10	L11	L12	L13	L14	L15
gh0	gh1	gh2	gh3	gh4	gh5	gh6	gh7

0	1	2	3	4	5	6	7
L0	L1	L2	L3	L4	L5	L6	L7
low0	low1	low2	low3	low4	low5	low6	low7

Layout of I40 class data members
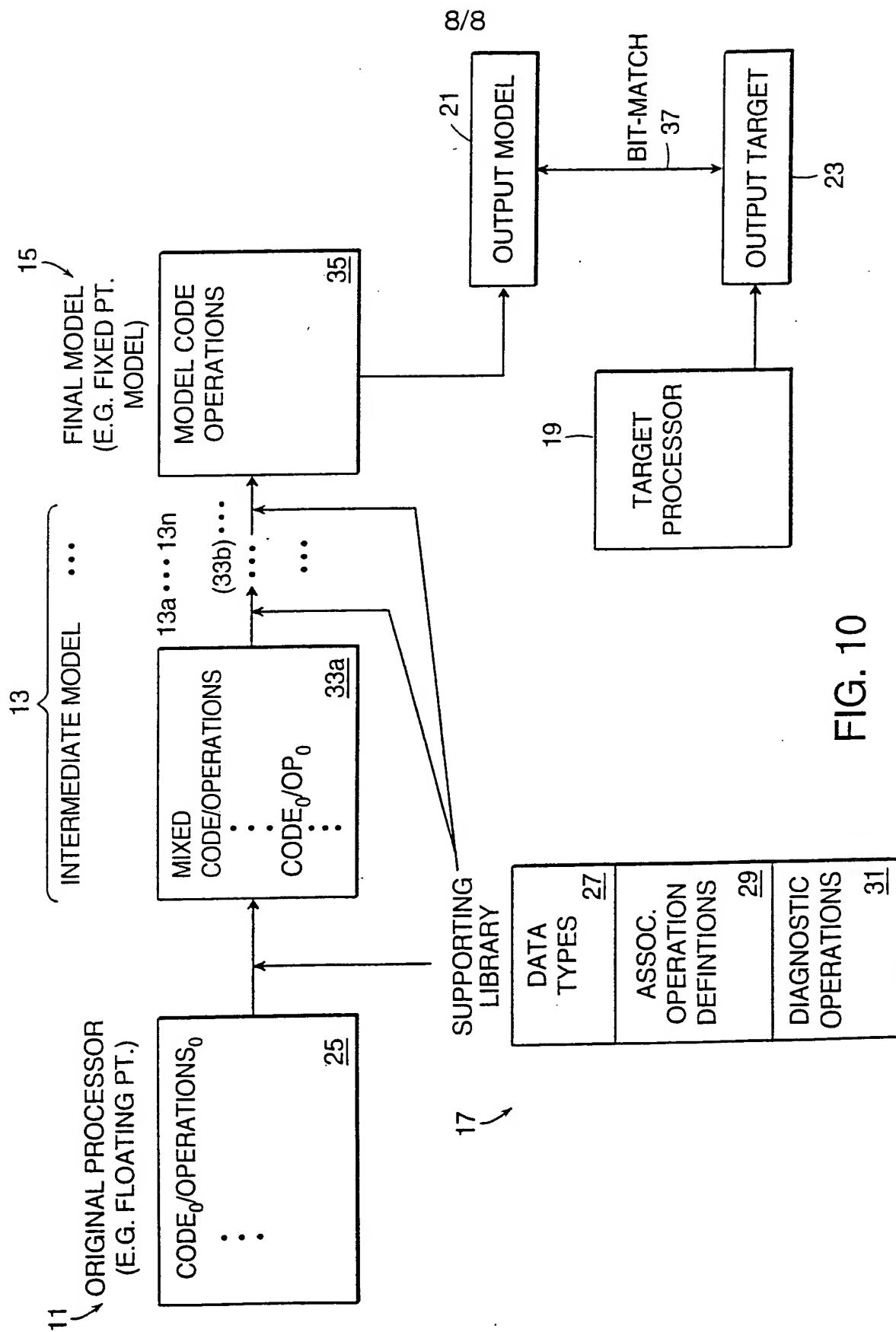
FIG. 8
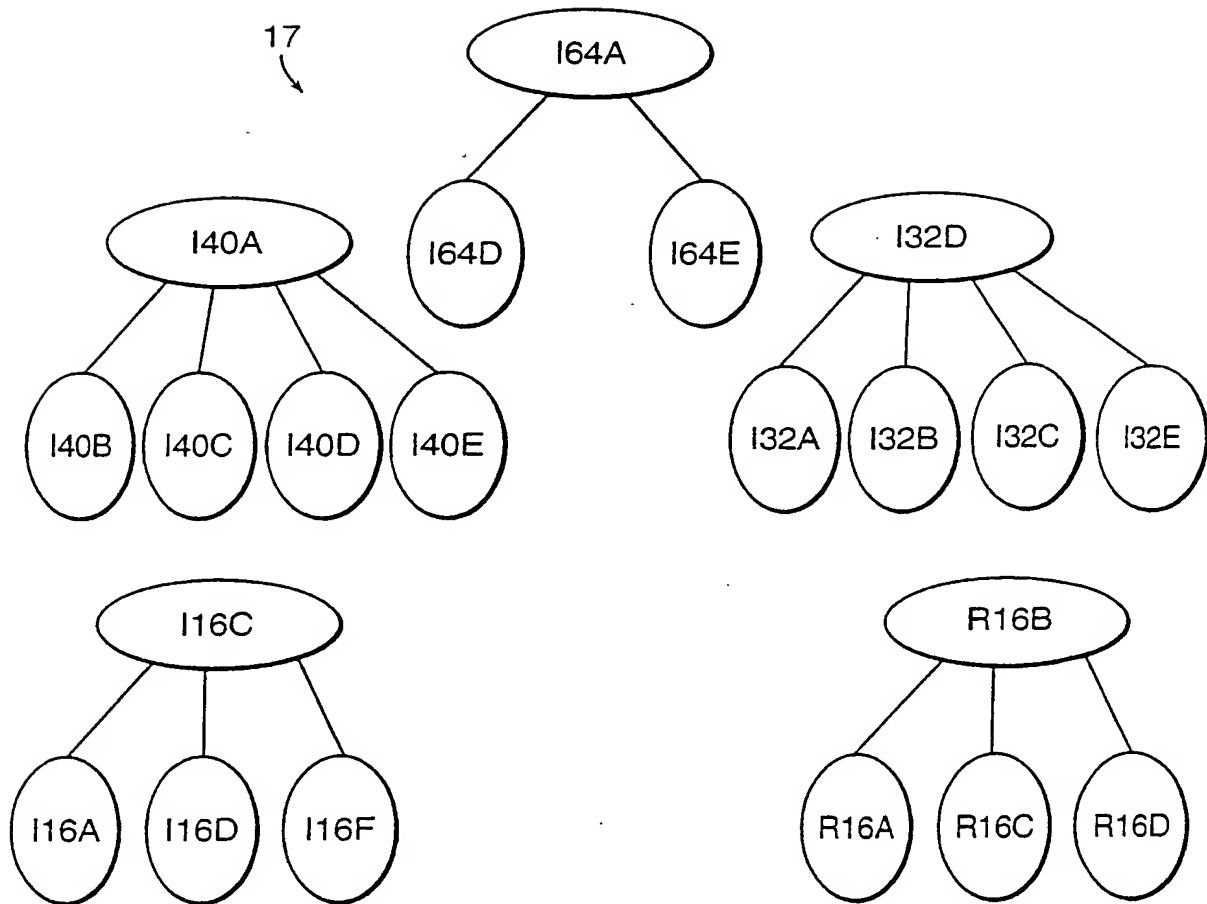
POWER STRUCTURE OF A CLASS HIERARCHY

FIG. 9

FIG. 10